

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

WHAT IS CLAIMED:

Claim 1 (original) A method of switching optical signals from a plurality of input circuits to one of a plurality of output circuits using an optical switching apparatus that includes an optical switch having a plurality of input ports and output ports, optical amplifiers for amplifying the optical signals received by the input circuits, and monitor circuits for monitoring the optical signals outputted to the output circuits, comprising the steps of:

- selecting a particular one of the plurality of monitor circuits;
- monitoring the optical signals at the output port connected to the selected monitor circuit to generate a feedback signal;
- selecting a particular one of the plurality of the optical amplifiers based on a predetermined configuration of the optical switch; and
- amplifying the optical signals by the selected optical amplifier based on the feedback signal.

Claim 2 (original) A method of switching optical signals from a plurality of input circuits to one of a plurality of output circuits using an optical switching apparatus that includes an optical switching unit having a plurality of input ports and output ports, input signal adjusting units for adjusting state of optical signals received by the input circuits, and output signal monitoring units for monitoring the state of the optical signals outputted to the output circuits, comprising the steps of:

- selecting a particular one of the output signal monitoring units;
- monitoring the optical signals at the output port connected to the selected output signal monitoring unit to generate a feedback signal;

selecting a particular one of the input signal adjusting units based on a predetermined configuration of the optical switching unit; and

amplifying the optical signals by the selected input signal adjusting unit based on the feedback signal.

Claim 3 (original) The method as claimed in claim 2, wherein the output signal monitoring units monitor an amplitude of the optical signals outputted from the optical switching unit to generate the feedback signals.

Claim 4 (original) The method as claimed in claim 2, wherein the output signal monitoring units monitor a differential loss among different channels outputted from the optical switching unit to generate the feedback signals.

Claim 5 (original) A method of switching optical signals from a plurality of input circuits to one of a plurality of output circuits, comprising the steps of:

selecting a particular one of the output signal monitoring units;

monitoring the optical signals at an output port connected to the selected output signal monitoring unit to generate a feedback signal;

selecting a particular one of the input signal adjusting units based on a predetermined configuration of an optical switching unit; and

amplifying the optical signals by the selected input signal adjusting unit based on the feedback signal.

Claim 6 (original) The method as claimed in claim 5, wherein the output signal monitoring units monitor an amplitude of the optical signals outputted from the optical switching unit to generate the feedback signals.

Claim 7 (original) The method as claimed in claim 5, wherein the output signal monitoring units monitor differential loss among different channels outputted from the optical switching unit to generate the feedback signals.

Claim 8 (new) An optical switch for switching optical signals from a plurality of input circuits to one of a plurality of output circuits, comprising;

- an optical switching unit;
- input ports connected to said optical switching unit for inputting the optical signals to said optical switching unit;
- output ports connected to said optical switching unit for outputting the optical signals from said optical switching unit;
- optical amplifiers connected to said input ports for amplifying the optical signals received by the input circuits;
- monitor circuits located at said output ports for monitoring the optical signals outputted to the output circuits;
- a monitor selector connected to said monitor circuits for selecting one of said monitor circuits, the selected monitor circuit being operationally connected to one of said output ports for generating a feedback signal; and
- an amplification control connected to said monitor selector and said optical amplifiers for selecting one of said optical amplifiers based on a predetermined configuration of the optical switch, wherein said selected optical amplifier amplifies the optical signals based on the feedback signal.

Claim 9 (new) An optical switch for switching optical signals from a plurality of input circuits to one of a plurality of output circuits, comprising;

- an optical switching unit;
- input ports connected to said optical switching unit for inputting the optical signals to said optical switching unit;

output ports connected to said optical switching unit for outputting the optical signals from said optical switching unit;

input signal adjusting units connected to said input ports for adjusting state of the optical signals received by the input circuits;

monitor circuits located at said output ports for monitoring the optical signals outputted to the output circuits;

a monitor selector connected to said monitor circuits for selecting one of said monitor circuits, the selected monitor circuit being operationally connected to one of said output ports for generating a feedback signal; and

a control connected to said monitor selector and said input signal adjusting units for selecting one of said input signal adjusting units based on a predetermined configuration of the optical switch, wherein said selected input signal adjusting unit adjusts the optical signals based on the feedback signal.

Claim 10 (new) The optical switch as claimed in claim 9, wherein said output signal monitoring units monitor an amplitude of the optical signals outputted from the optical switching unit to generate the feedback signals.

Claim 11 (new) The optical switch as claimed in claim 9, wherein said output signal monitoring units monitor a differential loss among different channels outputted from the optical switching unit to generate the feedback signals.

Claim 12 (new) An optical switch for switching optical signals from a plurality of input circuits to one of a plurality of output circuits, comprising;

an optical switching unit having an output port and an input port;

input signal adjusting units connected to said input ports for adjusting state of the optical signals received by the input circuits; and

monitor circuits located at said output ports for monitoring the optical signals outputted to the output circuits and for generating a feedback signal, wherein said

selected input signal adjusting unit adjusts the optical signals based on the feedback signal.

Claim 13 (new) The optical switch as claimed in claim 12, wherein said monitor circuits monitor an amplitude of the optical signals outputted from said optical switching unit to generate the feedback signals.

Claim 14 (new) The optical switch as claimed in claim 12, wherein said monitor circuits monitor differential loss among different channels outputted from said optical switching unit to generate the feedback signals.